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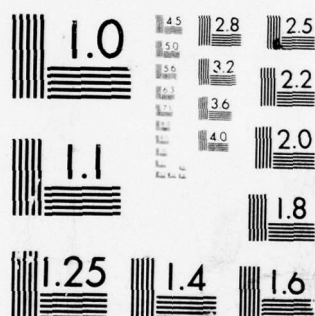
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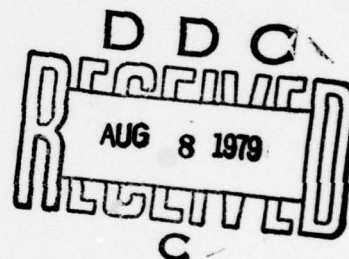
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FAMILY AND CAREER VALUES: SEX DIFFERENCES
IN A WORKING POPULATION

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Technical Report Number 4

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The research reported describes sex differences in values and attitudes concerning families, careers and the relationships between family and career responsibilities. Respondents were 104 male and 124 female employees of Bell Telephone Company of Pennsylvania, including 44 first line supervisors and 184 of their subordinates.		

Four general conclusions were drawn from the analyses:

- (1) Women and young people had somewhat more egalitarian views than men and those over 30 regarding appropriate goals for men and women in balancing family and career concerns;
 - (2) Women are perceived as having primary responsibility for child rearing;
 - (3) Men's careers are perceived as having higher priority than women's careers;
 - (4) Women perceived stronger emotional support from their friends for their choice of careers, while men perceive stronger support from their spouses and parents.
- Implications of the findings for sexual integration of civilian and military work forces are discussed.

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INTRODUCTION

The Office of Naval Research has sponsored research by the University City Science Center into issues pertinent to the utilization of women in the Navy. The purpose of the research is to investigate, in a population similar to the enlisted force in the Navy, differences between men and women in perceptions and attitudes that could have an impact on their efficiency and satisfaction on the job. The research program has investigated:

- Sex differences in attributions of success and failure (Kipnis & Kidder, 1977)
- Multi-dimensional scaling (Tzeng & Landis, 1977)
- Psychological androgyny in a working population (Grissom et al., 1979)
- Working relationships between men and women (Good et al., 1979)
- Sex differences with respect to family and career values in a working population
- Sex differences in attitudes toward job characteristics (Good & Kirkland, 1979).

This report describes responses by male and female members of a sample drawn from a working population on their values and attitudes with respect to their families, their careers, and the relationships between family and career.

METHOD

The research design was to collect several sets of data from people who worked together, and from their first-line supervisors, so that a comprehensive analysis of relationships between demographic data; background information; job history; expectations for the future; and attitudes toward their jobs, co-workers, and supervisors (or subordinates in the case of supervisors) could be conducted. A self-administered survey instrument was developed and tested on populations of college students.

A modified and condensed instrument was then administered to 280 employees of the Bell Telephone Company of Pennsylvania including 55 first-line supervisors and 225 of their subordinates. The Bell Telephone Company allowed company time for respondents to complete the survey. Subjects received stamped envelopes addressed to the Science Center for returning the questionnaires anonymously. Completed questionnaires were received from 228 respondents.

Subjects

The sample included 124 women and 104 men, of whom 8 men and 27 women were black. The distribution of supervisors and non-supervisors, and the sexual composition of work groups, are shown in Table 1.

TABLE 1

DISTRIBUTION OF RESPONDENTS BY WORK GROUP TYPE

Sex of Supervisor	Male	Male	Male	Female	Female	Female	
Sex of Subordinates	Male	Mixed	Female	Male	Mixed	Female	Total
Supervisors	11	7	6	2	9	9	44
Male Subordinates	32	20	0	6	22	0	80
Female Subordinates	0	19	18	0	36	31	104
Total Respondents	43	46	24	8	67	40	228

Respondents ranged in age from 20 to 59, with a mean age of 34.5. They had worked at Bell Telephone from one to 37 years, with an average of 12.6 years. Two thirds of the sample held one or no jobs prior to joining Bell Telephone; 95% expected to be working for the same company five years hence. Nearly all (94%) grew up in Pennsylvania or the northeastern United States; 47% were raised in urban areas, 32% in suburban areas, and 21% in rural areas and small towns.

Men in the sample had slightly more education than women: 100% of the men and 94% of the women were high school graduates; 45% of the men and 31% of the women had attended or graduated from college.

Most respondents were married, including 84% of the men and 45% of the women. Forty men and 63 women had working spouses. A fifth of the women (21%) and 3% of the men were separated, divorced or widowed. The remaining 34% of the women and 14% of the men described themselves as single or engaged.

Perceived socioeconomic status of their families during the respondents' childhoods differed somewhat for men and women (Chi-square = 12.5, $df=4$, $p<.05$). The five response categories are listed below with the proportion of men and women selecting each category in parentheses.

1. Money was no concern; we had almost everything we wanted (1% of men; 7% of women).
2. We could easily afford all necessities and some luxuries (18% of men; 17% of women).
3. With careful budgeting, we could afford necessities and an occasional luxury (68% of men; 50% of women).
4. We had difficulty making ends meet for necessities (11% of men; 20% of women).
5. We often could not make ends meet, so that we were recipients of public or private assistance (2% of men; 6% of women).

RESULTS

Family issues, to be discussed first, include questions about child care during working hours and time spent in family interactions.

The second area, career issues, includes questions about the type of job respondents held at the time of the survey and the job they expect to hold five years hence; the emotional support provided by parents, spouses, and friends for respondents' career choices; and the relative value of the respondents' and their spouses' careers.

The balance between family and career concerns, discussed in the third section, includes analysis of hypothetical situations such as caring for a sick child and moving to advance own or spouses's career; and stereotypes concerning men and women.

Family Values

Ninety-four respondents (41%) had no children. Of these, two men and 28 women said they planned never to have children. More men than women in the sample had pre-school and elementary school age children. The care of these children during the respondent's working hours differed for men and women: 26 of the 34 men with children under five years said their spouses cared for the children, while 10 of 19 women with pre-school children reported that they were with baby sitters (Chi-square = 25.5, $df=3$, $p<.0001$). Men and women also differed in the number of children they would like to have eventually; men wanted somewhat larger families (Chi-square = 19.8, $df=5$, $p<.001$).

The women in the sample, though they worked outside the home, spent or expected to spend somewhat more time in family interactions in an average week than did male respondents. Most (65%) of the men estimated 21 to 40 hours per week, whereas 46% of the women estimated more than 31 hours per week (Chi-square = 9.7, $df=4$, $p<.05$).

Career

Job titles at Bell Telephone Company are not sex-typed. However, certain categories of jobs are traditionally male - such as telephone line-men, or traditionally female - such as telephone operators. Crosstabulation of categories of jobs by sex confirmed that members of the sample followed the traditional pattern (Chi-square = 82.7, $df=4$, $p < .0001$). Outside craft jobs tended to be held by men, clerical and secretarial jobs by women; twice as many men as women had inside craft jobs, and twice as many women as men held other non-craft jobs. Administrative jobs were held by equal proportions of men and women.

There was a high degree of stability within job types over time: 48% of female respondents and 64% of male respondents expected to hold the same type of job in five years as they held when the questionnaire was administered. Most respondents who anticipated holding a different type of job in five years expected to move into administration. At the time of the survey, 17% of the men and 16% of the women in the sample held administrative jobs; 44% of the men and 47% of the women expected to be in administrative jobs in five years.

Respondents were asked about the perceived emotional support of their parents, spouses and friends for their current jobs. Men and women both perceived equally strong encouragement from their parents and spouses. However, men perceived their closest male friends as far less encouraging regarding their jobs than women perceived their closest female friends to be (Chi-square = 13, $df=4$, $p < .05$). The majority of women (57%), but only 33% of the men, said their same sex friends were very encouraging; 42% of the men and 25% of the women said their closest same sex friends were neither encouraging nor discouraging. A similar pattern was reported for perceived encouragement from opposite sex friends, but the difference did not reach significance. Both men and women perceived their mothers as very favorably inclined toward their jobs. However, men perceived somewhat more favorability from their fathers than did women (Chi-square = 14.3, $df=3$, $p < .005$). While men perceived their fathers' attitudes as very favorable (75%) or somewhat favorable (21%), women perceived their fathers' attitudes as very favorable (72%) or neither favorable nor unfavorable (20%). A similar pattern occurred for perceived favorability of respondents' spouses with men's spouses' attitudes very or somewhat favorable (67% and 22%, respectively); and women's spouses' attitudes very favorable or neutral (68% and 17%, respectively; Chi-square = 8.7, $df=3$, $p < .05$). As with encouragement, female respondents reported more favorable attitudes from their closest friends than did men. Whereas 61% of the women perceived their closest female friends as well as their closest male friends to have very favorable attitudes toward their jobs, only 38% of the men perceived their closest friends of each sex to have very favorable attitudes toward their jobs (Chi-square = 12.2, $df=4$, $p < .05$ for same sex friend; Chi-square = 15.2, $df=4$, $p < .005$ for opposite sex friend).

The value which respondents assigned to their own careers was very high among both men and women. To the question, "How important is your career to you?", 46% of the men and 49% of the women said their careers were very important; 37% of the men and 39% of the women said their careers were important. A cross-check of career importance against marital status indicated that married and unmarried respondents valued their careers equally.

A parallel question concerning spouses' careers was also asked: "If your spouse (or the person of the opposite sex with whom you live) currently has a job, how important is this job/career to him or her?" The 39 men and 63 women who had working spouses responded very differently to this item (Chi-square = 41.8, $df = 4$, $p < .0001$). While 39 (62%) of the women said their husbands' careers were very important to their husbands, only 4 (10%) of the men said their wives' careers were very important to their wives, as shown in Table 2.

TABLE 2

IMPORTANCE OF SPOUSE'S CAREER TO SPOUSE

	Men Importance of Wife's Career To Her		Women Importance of Husband's Career To Him	
Very Important	4	10%	39	62%
Important	12	31%	19	30%
Somewhat Important	16	41%	4	6%
Not Important	7	18%	0	
Very Unimportant	0		1	2%

A crosstabulation of the importance of the respondent's career to him/her against importance of the spouses' career to the spouse yielded significantly different patterns among both men and women (Chi-square = 23.4, $df=9$, $p < .005$ for men; Chi-square = 18.9, $df=9$, $p < .05$ for women). For men, 39% of crosstabulated responses fell on the principal diagonal, indicating that equal importance was assigned to own career and to wife's valuing of her career. Most (56%) of the men's responses fell in cells above the principal diagonal, indicating greater importance attributed to own career than to wife's valuing of her career. Only 5% of men's responses fell in cells below the principal diagonal, indicating lower importance attributed to own than to spouse's career. Women's responses included 52% on the principal diagonal, indicating equal importance for both careers; 10% above the diagonal, indicating own career valued more highly; and 38% below the diagonal, indicating greater importance assigned to husband's career.

Family and Career

Respondents were asked a set of hypothetical questions involving the balancing of family and career responsibilities. Unmarried respondents were asked to imagine themselves married in responding to certain items. An analysis of responses showed no systematic differences by marital status of respondents.

The first projective item asked whether the respondent, the spouse, or both would take two weeks off from work to care for a sick child. The responses from men and women differed substantially (Chi-square = 99.0, $df=3$, $p < .0001$). The most frequent response from women (48%) was that they would take time off, while 45% of men said their wives would take time off. (Leaving the child with a relative or neighbor was the response of 12% of the men and 31% of the women.) No women expected their spouses to take time off, but 24% of the women and 37% of men said that both they and their spouses would take time off from work to care for the child.

Two parallel sets of items asked respondents to imagine that they were married and that both they and their partners were pursuing careers. Then they were asked whether they would move if it were required to advance their own or their spouse's careers. Six descriptions of job prospects for the partner whose job had not been relocated were given, with two response categories for each: Probably Would Move and Probably Would Not Move. Affirmative responses, expressed as proportions taken from twelve crosstabulation tables with sex of respondent and the two response categories as dimensions, are shown in Table 3.

Table 3

PROPORTION OF RESPONDENTS WHO WOULD PROBABLY MOVE IF THEY OR
THEIR SPOUSES WERE REQUIRED TO MOVE FOR CAREER ADVANCEMENT

Job Prospects for Partner in the New Location	Respondent's Move Required for Advancement in Own Job			Spouse's Job		
	Men	Women	Chi ²	Men	Women	Chi ²
Definitely Get as Good a Job or Better	79%	90%	4.9*	81%	88%	1.6
Definitely Get Not Quite as Good a Job	77%	67%	2.3	62%	76%	5.0*
Possibly Get as Good a Job or Better	61%	46%	4.5*	48%	64%	5.7*
Possibly Get Not Quite as Good a Job	63%	37%	14.1***	44%	57%	3.1
Definitely Get an Inferior Job	26%	7%	14.8*	3%	16%	9.7**

* $p < .05$ ** $p < .01$ *** $p < .001$

Slightly more women than men would move to advance their own careers, if their spouses could definitely get a job which was as good as or better than their present job. However, if there was any doubt that the spouse could get a job as good or better than his/her present one, women were significantly more reluctant to move than men. Women would more probably move in order to advance their husbands' careers, but would not move to advance their own careers if the move would jeopardize their husbands' careers. Men would probably move to advance their own careers regardless of the effect on their wives' careers. Almost no men would move to advance their wives' careers at the price of inferior jobs for themselves. At least 10% of the women and 20% of the men would never move, perhaps reflecting a dislike of moving or a preference for present surroundings.

The two sets of Job Move items were subjected to the Guttman Scaling procedure contained in the Statistical Package for the Social Sciences,* for all respondents, and for men and women separately. The coefficient of reproducibility was .95 or .96 for each analysis, indicating that the six Own Job Move items and the six Spouse Job Move items each compose a single valid scale. The coefficient of scalability was .79 to .87 indicating unidimensional and cumulative scales. Responses for the six components of each set were added for each respondent to yield two summary scores which measure the likelihood of moving to advance own and spouse's careers. A third variable, defined as the difference between the summary scores, was computed in order to measure the relative likelihood of each respondent's moving to advance own versus to advance spouse's career.

The third variable, relative likelihood, correlated moderately with the importance attributed to spouse's career ($r = .14$, $p < .05$) and with the relative importance of own versus spouse's career ($r = .14$, $p < .05$). Both correlations indicate that respondents are more likely to move to advance their own careers if they assign more importance to their own careers than they perceive their spouses assigning to their careers. The summary score for likelihood of moving to advance spouse's career was associated with relative career importance ($r = .14$, $p < .05$) indicating that those who said their spouses valued their careers less than respondents valued theirs were also less willing to move in order to advance their spouse's careers. There was also a positive association between number of children and likelihood of moving to advance spouse's career ($r = .18$, $p < .01$); respondents with more children (regardless of their age) were less willing to move.

Willingness to move was also associated with having moved as children. Those whose families had moved more than 25 miles prior to respondents' 18th birthdays were more willing to move to advance their spouse's careers ($r = .15$, $p < .05$); those who had never moved as children were less willing to move.

*N.H. Nie, et al., Second Edition, New York: McGraw-Hill, 1975.

An analysis of variance of willingness to move for spouse's career advancement among married (or formerly married) respondents showed no significant effects by sex, marital status, age or relative (own versus spouse's) career importance. When relative willingness to move for own versus spouse's career advancement was subjected to the same four-way analysis of variance, the only significant effect was for sex of respondents ($F(1,154) = 10.0, p < .002$). Men were more willing to move to advance their own careers while women were more willing to move to advance their husbands' careers.

A four-way analysis of variance by sex of respondents, whether respondents worked in mixed or single sex work groups, status (supervisor or non-supervisor) and job type, was performed on willingness to move for spouse's career. The overall F -ratio was significant ($F(22,205) = 8.6, p < .005$) as was the interaction of sex by job type ($F(4,223) = 2.5, p < .05$). Men, outside craft workers (predominantly male), and those with administrative jobs (predominantly supervisors) were least willing to move. Women and those with clerical and secretarial jobs (predominantly female) were most willing to move to advance their spouses' careers.

The same four-way analysis of variance design (by sex, mixed or single sex work group, supervisor or non-supervisor status and job type) applied to relative willingness to move for own versus spouses' career showed more significant effects, but the same overall pattern (ANOVA $F(22,205) = 3.4, p < .0001$). Men were more willing to move to advance their own careers, while women would move to advance their spouses' careers ($F(1,226) = 19.7, p < .0001$). Outside craft workers (men) and those in administrative jobs (supervisors) would move to advance their own careers, while women and those in clerical and secretarial jobs (women) would more often move to advance their spouses' careers (interaction of sex with supervisory or non-supervisory status: $F(1,226) = 6.0, p < .05$; interaction of sex with job type: $F(4,223) = 5.6, p < .0001$).

The final set of items relating to the balance of family and career responsibilities included three statements about which respondents were asked their opinion. A 4-point scale, without a neutral middle point, was used to force agreement or disagreement with each statement. The first was "Women tend to be more competent than men in family and domestic interactions." Men's and women's responses to this item differed significantly (Chi-square = 21.4, $df=3, p < .0001$), with 48% of the men and 73% of the women agreeing or strongly agreeing.

The two remaining items were identical except for gender: "A woman can be successful in her marriage, in raising her children, and in her career" and "A man can be successful in his marriage, in raising his children, and in his career." Only eleven men and nine women disagreed with the statement about a man. However, when the subject of the statement was a woman, 39% of the men and 14% of the women disagreed (Chi-square = 17.3, $df=3, p < .001$). Men's responses to each statement were crosstabulated, as were women's, with consistent results for the two analyses. Most women (60%) assigned the same score for each statement, indicating that they agreed or disagreed equally with both; 20 women (16%) gave a higher score for the female than for the male subject; and 29 women (24%) agreed more strongly that a man can be successful in marriage and

career than can a woman (Chi-square = 29.6, $df=9$, $p<.0005$). Men's responses to the two statements were slightly less egalitarian, but followed the same pattern as women's responses. Most men (56%) agreed or disagreed equally with both statements; only five men (5%) agreed more strongly that a woman can be successful in marriage and career than a man; and 40 men (39%) agreed more strongly with the statement with a male subject than with a female subject (Chi-square = 60.0, $df=9$, $p<.0001$).

Analysis of variance of responses to each statement separately, and of the difference between scores assigned to each statement, showed a significant effect only for sex of respondent. The other variables entered (supervisor or non-supervisor status, job type, and mixed or single sex work group) had neither significant main effects nor interactions. The cell means for the analysis of variance of the difference in scores assigned to the two statements (A man can be successful . . . versus A woman can be successful . . .) show that no group assigned a more favorable score when the subject of the sentence was female than when the subject was male. Analysis by age groups (also not significant) showed that respondents under 30 years tended to assign equal scores for both statements more often than those over 30.

DISCUSSION

Four patterns emerged from the analyses of the set of items relating to family and career values:

- Women are perceived as having primary responsibility for child rearing.
- Men's careers are perceived as having higher priority than women's careers.
- The perceived emotional support network of women differs from that of men in that women rely more heavily on the support of friends while men rely more on emotional support from their spouses.
- Women and young people had somewhat more egalitarian views than men and those over 30 regarding appropriate goals for men and women in balancing family and career concerns.

Fewer women than men in the sample had young children; fewer men than women had working spouses. These facts, combined with the far greater number of women (28) than men (2) who said they planned never to have children, and the larger family sizes desired by men, support the contention that child rearing versus pursuit of a career are perceived as mutually exclusive choices for women. Additional support for this contention is shown by responses to the question concerning care of a sick child; 82% of men and 82% of women said the wife or both spouses would take time from work to care for a sick child. This pattern of responses also suggests that both men and women perceive family and career concerns at least to some extent as mutually incompatible alternatives. The impli-

cation of these findings for naval personnel policy is that the productivity of married women with children may be attenuated by family responsibilities unless support systems such as day care centers and nursery schools are provided.

Men and women also agreed that men's (that is husbands') careers have a higher priority than women's. Both men and women valued their own careers equally highly. However, men were more likely to move to advance their own careers (even at the expense of poor job prospects for their wives) while women were more likely to move to advance their husbands' careers (even at the expense of poor job prospects for themselves). All but 5% of the men and 10% of the women said that their own and their spouses' careers were either valued equally or the man's career was more important. Tensions which might arise within the family are avoided if both spouses agree that when both partners are pursuing careers the husband's career will take precedence in case of conflict. Concurrent transfer and assignment of married naval personnel will be a prerequisite to stability and retention of these personnel.

A strong contrast emerged between men's and women's responses to the set of items concerning perceived emotional support from parents, spouses, and friends. Respondents' mothers were perceived as both equally encouraging and equally favorable toward respondents' jobs. Men perceived their fathers as having more favorable attitudes than women perceived in their fathers. Spouses of members of both sexes were equally encouraging, but men's spouses were more favorable. The most striking difference was in perceived support from friends. Women perceived far greater encouragement and favorability from their female friends than did men from their male friends. Women perceived both their female and their male friends as more favorable toward their jobs than men perceived their friends to be. Women apparently rely more heavily on emotional support from peers, while men apparently rely more on the support of their parents and spouses. An implication for Navy managers is that women's ability to find and use emotional support from friends outside familial settings could enable them to find support among their peers even when the supervisory hierarchy is hostile or resistant. Men's dependency on parents and spouses for emotional support, reflected in the work setting in a need for emotional support from superiors, can be provided by either male or female supervisors (also see Technical Report No. 6 in this series).

Women and younger respondents reflected somewhat more egalitarian attitudes in responding to the two stereotypic sex role statements: "A man/woman can be successful in marriage, raising children, and career". The majority of men and of women assigned the same score to both statements or a higher score to the statement with a male subject (84% of women and 95% of men). Though no group assigned a higher score to the statement with a female than with a male subject, there was a clear tendency for younger members of the sample to be more egalitarian than older members. Women also tended to be somewhat more egalitarian than men in their assignment of scores on other items. There are apparently no countervailing stereotypic biases among women corresponding to the sex-typed biases which appeared among men's responses. Whereas men want to be or see themselves

as better than women, women want to be or see themselves as equal to men. This could present a severe problem in specialities in which women find high satisfaction, reenlist at a higher rate than men, and eventually come to predominate numerically in the senior petty officer grades.

The major finding of the results reported here is that there is general agreement between men and women concerning appropriate roles for members of each sex. Women's responses suggest that women see broad roles which are appropriate for either men or women. Men's responses suggest a narrower range of sex-appropriate roles with distinct roles assigned to men and to women, with less overlap between roles than is seen by women. Patterns of differences by age suggest that attitudes are becoming less restrictive among men as well as women, though women's attitudes, especially young women's attitudes, are changing more quickly.

The implications of this finding for organizations seeking to expand the participation by women in previously predominantly male groups are the following:

- Groups in which the norms are established by middle-aged men are likely to be most insistent on narrow definitions of male and female roles. Younger men are more likely to accept broader definitions of sex roles.
- Resistance to integration of women is likely to diminish with time as the presently young reach supervisory ranks and play more important parts in defining group values.

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